

## Claims

*SuK A1*

1. In a communication system, a method comprising:
  - 2 determining duty cycle of a communication channel;
  - 3 controlling power level of said communication channel based on said determined duty cycle.
2. The method as recited in claim 1 further comprising:
  - 2 comparing said determined duty cycle against a duty cycle threshold; wherein an adjustment for controlling power level via said controlling is based on said comparing.
3. The method as recited in claim 1 further comprising:
  - 2 informing a mobile station of said determined duty cycle.
4. The method as recited in claim 1, wherein said controlling comprises of
  - 2 selecting a code channel to pilot channel power ratio for controlling power level of said communication channel.
5. The method as recited in claim 4 further comprising:
  - 2 informing a mobile station of said selected code channel to pilot channel power ratio.

*Sub A2*

6. The method as recited in claim 1 wherein said communication channel  
2 is between a mobile station and a base station, wherein said controlling  
comprises:

4 adjusting a parameter of a power control outer loop at said base station,  
wherein said power control outer loop is operating to control power level of a  
6 signal transmitted from said mobile station.

7. The method as recited in claim 1 wherein said communication channel  
2 is between a mobile station and a base station, wherein said controlling  
comprises:

4 adjusting a frame error rate set point, at said mobile station, of a power  
control outer loop, wherein said power control outer loop is operating to control  
6 power level of a signal transmitted from said mobile station.

8. The method as recited in claim 1 wherein said communication channel  
2 is a dedicated control channel.

9. The method as recited in claim 8, wherein said controlling comprises of  
2 modifying a code channel to pilot channel power ratio associated with a traffic  
channel.

10. The method as recited in claim 9 further comprising:

2 using said modified code channel to pilot channel power ratio to control  
power level of said dedicated control channel.

11. The method as recited in claim 1 wherein said controlling comprises of  
2 adjusting a target power level of a pilot channel for controlling power level of said  
communication channel.

12. The method as recited in claim 11 wherein said communication  
2 channel is between a mobile station and a base station, further comprising:  
4 communicating said adjusted target power level of said pilot channel to  
said mobile station.

13. The method as recited in claim 11 wherein said communication  
2 channel is between a mobile station and a base station, wherein said pilot  
channel originates from said mobile station.

14. The method as recited in claim 1 wherein said controlling comprises of  
2 adjusting a power level of a power control sub-channel.

15. The method as recited in claim 14 wherein said communication  
2 channel is between a mobile station and a base station, wherein said power  
control sub-channel originates from said base station.

*Sub A3*

16. In a communication system, an apparatus comprising:

2 a controller configured for determining duty cycle of a communication channel;

4 wherein said controller further configured for controlling power level of said communication channel based on said determined duty cycle.

17. The apparatus as recited in claim 1, wherein said controller is

2 configured for comparing said determined duty cycle against a duty cycle threshold, and wherein an adjustment for controlling power level via said

4 controlling is based on said comparing.

18. The apparatus as recited in claim 16 further comprising:

2 a transmitter configured for informing a mobile station, via a receiver in

4 said mobile station, of said determined duty cycle.

19. The apparatus as recited in claim 16, wherein said controller is

2 configured for performing said controlling by selecting a code channel to pilot

4 channel power ratio for controlling power level of said communication channel.

20. The apparatus as recited in claim 19 wherein said transmitter is

2 configured for informing a mobile station of said selected code channel to pilot

4 channel/power ratio.

*Claim 21*

21. The apparatus as recited in claim 16 wherein said communication channel is between a mobile station and a base station, wherein said controller is configured for said controlling by adjusting a parameter of a power control outer loop at said base station, wherein said power control outer loop is operating to control power level of a signal transmitted from said mobile station.

22. The apparatus as recited in claim 16 wherein said communication channel is between a mobile station and a base station, wherein said controller is configured for said controlling by adjusting a frame error rate set point, at said mobile station, of a power control outer loop, wherein said power control outer loop is operating to control power level of a signal transmitted from said mobile station.

23. The apparatus as recited in claim 16 wherein said communication channel is a dedicated control channel.

24. The apparatus as recited in claim 23, wherein said controller is configured for said controlling by modifying a code channel to pilot channel power ratio associated with a traffic channel.

25. The apparatus as recited in claim 24 wherein said controller is configured using said modified code channel to pilot channel power ratio to control power level of said dedicated control channel.

26. The apparatus as recited in claim 16 wherein said controller is  
2 configured for said controlling by adjusting a target power level of a pilot channel  
for controlling power level of said communication channel.

27. The apparatus as recited in claim 26 wherein said communication  
2 channel is between a mobile station and a base station, further comprising:  
4 a transmitter in said base station configured for communicating said  
adjusted target power level of said pilot channel to a receiver in said mobile  
station.

28. The apparatus as recited in claim 26 wherein said communication  
2 channel is between a mobile station and a base station, wherein said pilot  
channel originates from said mobile station.

29. The apparatus as recited in claim 16 wherein said controller is  
2 configured for said controlling by adjusting a power level of a power control sub-  
channel.

30. The apparatus as recited in claim 29 wherein said communication  
2 channel is between a mobile station and a base station, wherein said power  
control sub-channel originates from said base station.